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TRENDS IN LIABILITY

AFFECTING TECHNICAL WRITERS

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WHY LIABILITY RATES A WARNING

When most people think of "product liability" they imagine consumer products like "PAM" and hair dye, industrial and agricultural chemicals such as xylene, propane, and malathion, and equipment such as tractors and truck-lifts. In a product liability case the definition of "product" includes more than these easily imagined physical products. Product liability decisions have pronounced defective a wide variety of product components: brochures, catalogue data, price lists, advertising (both mail and periodical ads), care and use books, warranty cards and explanations, instruction manuals, installation manuals, repair manuals, shipping and display tags, labels, nameplates, decals, field assembly and/or installation services, service and maintenance, and spare or replacement parts. Obviously, technical writers are involved in creating many of these product components.

Even this broader picture of what constitutes a "product" does not show all the ways in which writers are involved in the prevention and defense of product liability actions. In a key decision in the case of Barker v. Lull Engineering (1978), the California Supreme Court made two rulings, one of which has special significance for writers:

> "Second, a product may alternatively be found defective in design if the plaintiff demonstrates that a product's design proximately caused his injury and the defendant fails to establish in light of the relevant factors, that on balance, the benefits of the challenged design outweigh the risk of danger inherent in such design." [emphasis added]

The court was explicit: the burden of proof is on the defendant company to persuade the trier of fact that the merits of the design outweigh the risk. As a result, all the documents generated during the products' life cycle--design memos, design tests, clinical trials, trial use reports, letters, proposals, etc.--take on an urgent relevance, because these documents are likely to become the only available means of showing that the product was not defectively designed. These documents will become the evidence that the product underwent balanced and well-considered planning, development,

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testing, quality control, and field testing. Thus, technical writers who prepare any of the attending pre-sale or post-sale documents and any technical specialists involved in product design, development and testing can be drawn into the arena of product liability litigation.

The arena is getting bigger, fast. Product liability suits in the United States, which were being filed at the rate of about 50,000 per year in the 1960's, increased during the 1970's to 500,000 a year, and may average nearly a million per year in the early 1980's, according to alarmed estimators. The Federal Government's Interagency Task Force on Product Liability concluded after an 18-month study that these estimates were much too high and that only 60,000 to 70,000 actions went forward annually.

The precise number of cases is probably less significant than the soaring costs of liability insurance. In 1978, manufacturers and retailers paid an estimated $ 2.75 billion for product liability insurance, compared with $ 1.13 billion in 1975. For some companies, insurance rates rose more than 200% in a single year. The panic price jumps by the insurance companies, added to the costs of legal fees and claims have created a crisis among manufacturers. Further, state supreme court judges changed several standards by which cases are judged in a series of precedent-setting cases that have encouraged the filing (and winning) of liability suits, which has in turn driven up costs.

Although the majority of cases are still brought on the basis of a defect in production, more and more cases are filed on the basis of "failure to warn." Plaintiffs' attorneys see several advantages in basing cases on the failure to warn or to give adequate instructions. The plaintiff often can prove his case without the expense of expert testimony and without preserving the physical evidence that is required in proving defects of manufacture or design. Further, the jury is more easily able to grasp the need for better warnings or directions than to understand the claimed deficiency of a complex design or manufacturing process. The defendant company can less frequently claim that the plaintiff had expert knowledge and was therefore guilty of contributory negligence. Thus, with more cases turning on "failure to warn," technical writers will be increasingly involved in the prevention and defense of product liability claims.

As if the expanding number of cases were not threat enough, the duty to warn has been expanded. For example, formerly it was held that a manufacturer or seller was not negligent if he failed to warn of danger that arose in the use of a product in an unlikely, unexpected, or unforeseeable manner [United States, Littlehale v. E. I. du Pont de Nemours and Co. (DC NY) 268 F Supp 791, affd (CA NY) 380 F .2d 274; also, Louisiana, Merwin v. D. H. Holmes Co. (1969, La App) 223 So .2d 878; and others]. Recent decisions have gone the other way. For example, Faberge was held responsible and paid $ 27,000 when a teenager poured perfume over a burning candle in order to scent it. Faberge claimed that it could not have foreseen that the product would have been poured on an open flame, a clear misuse of the product, but the defense was not accepted [Moran v. Faberge, Inc. 332 A .2d 11, 273 Md 538].

Implications of precedents and new laws should be noted by technical writers and watched for further developments, especially by those who contract

to write pre-sale and post-sale documents. The inclination to extend liability suits to include third parties may or may not eventually allow plaintiffs to bring suit against technical writing contractors and consultants. The State of Indiana has provided that a manufacturer can bring anyone who is actually at fault into a lawsuit as a third-party defendant. At present, it appears that employers in Indiana are the ones most likely to be named as third-party defendants, generally for actions leading to workplace accidents, such as unauthorized modification of equipment or failure to transmit warnings delivered by manufacturers. The possibility of being named as a third-party defendant becomes more ominous because of precedents providing that any ambiguity in the language of a warning furnished in connection with the sale of a product is to be "construed against the one who chose the words used." Schilling v. Roux Distributing Co. (1953) 240 Minn 71, 59 NW .2d 907. WARNING: It is time for technical writers to know more about liability.

LEGAL BACKGROUND

The current situation, which law professor A. S. Weinstein has described as caveat venditor--let the manufacturer beware--developed in a series of events over the last twenty years. For a hundred years before that, the situation had been caveat emptor--let the buyer beware--although gradually court decisions began to give buyers some protection. In 1842 a British mail guard riding shotgun was thrown from a coach and injured. When he sued the contractor who had supplied the coach to the Royal Postmaster, claiming the vehicle was defective, his claim was denied on the grounds that he had no privity of contract with the manufacturer. The privity requirement prevented most injured persons from suing manufacturers. The landmark case, MacPherson v. Buick Motor Co. in 1916 and subsequent cases altered the privity requirements and allowed injured persons to sue the manufacturers in some circumstances.

Most important, in 1962 the California Supreme Court set forth a doctrine of strict liability. The court explained that manufacturers are in a better position to prevent the sale of dangerous products than others, and if injuries occur from the use of products, manufacturers are best able to equitably distribute the losses among consumers. Subsequently, strict tort liability doctrine was elaborated in Section 402A of the Second Restatement of Torts, a publication of the American Law Institute. This private organization, made up of lawyers, judges, and professors, had no law-making powers, of course, but most state legislatures have since adopted some form of strict liability as a basis for product liability actions.

Even if a product is designed perfectly and manufactured free of defect, the product can be considered defective and the manufacturer negligent if he fails to warn the users of dangers that may arise in the use of the product. A Colorado court affirmed (1979) that "a product which is free of manufacturing or design defects nevertheless may be defective and unreasonably dangerous if not accompanied by adequate instructions and warnings" Anderson v. Heron Engineering Co., Inc. 604 P .2d 674; similarly in Embry v. General Motors 565 P .2d 1294, 115 Ariz 433 (1977).

LIABILITY PREVENTION PROGRAMS

The implications of "duty to warn" as it arises in product liability suits should be understood by all technical writers and technical professionals who write as part of their ordinary duties within organizations. Writers are in a key position to reduce costs and delays in the production of pre-sales and post-sales documents and to improve the efficacy of all warnings to consumers.

One way that technical writers can assist their companies is heading or participating in pre-accident products liability prevention and control programs, also called products integrity control programs. These programs, aimed at improving the safe design and production of the product as well as the adequacy of pre-sales and post-sales documents, accompanying tags, stamped warnings, and decals, should benefit consumers by creating better products and instructions. They should also benefit manufacturers by reducing the number of accidents and the number of claims by documenting the company's efforts to produce safe, reliable products and to provide proper guidance for users.

Several programs have been proposed, but they have many similarities. The key steps in such programs are summarized in the following excerpt from a report of the Subcommittee on Capital Investment and Business Opportunities of the Committee on Small Business of the House of Representatives, House Rep. 95-997, March 21, 1978, pages 68-69:

1. An explicit company policy concerning product safety, quality control, and risk prevention.

2. Rigorous testing of the program within the context of its use environment.

3. A product loss control committee headed by a person representing top management, who has clear authority to coordinate loss control activities. Members of the committee should include representatives from research, engineering and design, production, quality control, marketing, legal, safety, and insurance departments.

4. Procedures to assure that government standards and regulations which apply to product safety are understood and considered at all operating levels and are used as minimum requirements in product design.

5. Procedures for evaluating the potential for personal injury or property damage during use, or reasonably expected misuse, or products or changes in existing products.

6. Review of existing quality control procedures in relation to developing product liability law. Procedures that are clearly defined, well understood and closely followed.

7. Adherence to quality control and inspection procedures that are systematically documented.

8. Conspicuous posting of warnings and instructions in a permanent form where such information is necessary.

9. Review of all advertising, brochures, labels, warnings, warranties, and instructions by engineering and legal departments to insure that the information provided is accurate, clear and complete.

10. Permanent coding of components in order to identify the source, place and date of manufacture.

11. Systematic procedures for investigating product liability incidents and implementing remedial measures where necessary.

12. Maintenance of records through the expected life of each product, to include information on research, design, tests, quality control, sales, service and ownerships.

Although each one of these "steps" expands into many organizational processes and actions, the summary conveys an overall picture of the concerns of such a program. Articles describing these programs are listed in the bibliography.

Because product integrity or liability prevention requires the collaboration of a wide variety of company specialists, a program can be coordinated by the head of publications as well as by other engineering or production specialists. Most important, the technical writer should realize that he or she is involved in product integrity and product liability prevention whether a formal program exists or not. To reduce the costs of product liability prevention and control, technical writers must understand who must warn, who must be warned, when, and about what, and they must know what criteria will be applied in the evaluation of their warnings and instructions. This article reviews pertinent trends and points out cases to familiarize technical writers with the general but significant aspects of product liability.

WHO MUST WARN

The basic rules that govern the duty of manufacturers or sellers to warn of product-related dangers are set out in the American Law Institute's Second Restatement of Torts, mentioned earlier. The basic rule is that an individual or company supplying a product (chattel) to someone else must warn the buyer:

(a) if the supplier knows or has reason to know that the product is likely to be dangerous for the use for which it is supplied, or
(b) if those for whom the product is supplied are not likely to know that the product might be dangerous, or
(c) if certain conditions might make use of the product dangerous, even if the product is not dangerous in itself.

The supplier is subject to liability for harm caused by the product to those whom the supplier should expect to use it. This responsibility to warn holds whether the supplier provides the user with the product directly or supplies the product through a third person. The responsibility of the supplier extends to those who are not direct users but who are endangered by the product's probable use (such as bystanders, persons in the vicinity, etc.).

The duty to warn does not arise from the status of being a manufacturer or seller, or from the nature of the product, but from the superior knowledge that the manufacturer is supposed to have. A manufacturer is charged with having superior knowledge of the nature and qualities of its products, and is obligated to keep abreast of scientific information, discoveries, and advances pertaining to its business. For example, in Griffin v. Planters Chemical Corporation the manufacturer of a pesticide was determined to be negligent for having marketed a product that had toxic qualities unknown to the manufacturer. The company had not tested the product for toxicity and gave no warning. The label used, although in compliance with the requirements of the Secretary of Agriculture, was held inadequate. A retailer's employee was examining products at a distributor's place of business when a bag of one percent parathion dust burst open and the employee was exposed to its contents Griffin v. Planters Chemical Corp. (1969, DC SC) 302 F Supp 937. Manufacturers formerly were not usually held negligent for failing to warn when the manufacturer had no actual knowledge of the hazardous character of the product (for example, see Briggs v. National Industries (1949) 92 Cal App .2d 542, 207 P .2d 110), but they seem more likely to be held responsible for full knowledge of any dangerous potential now. For example, in a well-known case, Little v. PPG Industries, the appeals court held that "a manufacturer's failure to provide adequate warnings does not depend on manufacturer's knowledge of danger; such knowledge is assumed, and it is failure to give adequate warning that renders product unreasonably dangerous" 579 P .2d 940, Wash. App. 812, modified 594 P .2d 911, 92 Wash. .2d 118 (emphasis added).

Sellers as well as manufacturers many times are bound by the duty to warn. Where the non-manufacturing seller knows or should know that the product is or is likely to be dangerous for the use for which it was supplied, the seller has the duty to warn the buyer. In contrast, if the seller is merely a conduit in the distributive process, for example, selling a packaged product without the package's having been opened, the seller has no duty to warn of a dangerous characteristic of which he knows nothing Crandall v. Stop & Shop, Inc. (1937) 288 Il App 543, 6 NE .2d 685. Non-manufacturing sellers in some circumstances do have a duty to warn; for example, if the seller sells a large quantity of a particular product or acts as a distributor, he has superior knowledge, as in McLaughlin v. Mine Safety Appliances Co. (1962) 11 NY .2d 62, 226 NYS .2d 407, 181 NE .2d 430. And if the seller knows of the dangerous qualities of a product and also knows that the label or name of the product does not adequately convey knowledge of the danger to the buyer or to the public, he has a duty to warn Bower v. Corbell (1965, Okla) 408 P .2d 307; and Jones v. Hittle Service, Inc. (1976, Kan) 549 P .2d 1383, 219 Kan 627. And if the seller repackages, modifies, or alters the original product, he has a duty to warn.

In a 1979 case, the court affirmed the finding of the trial court, and dismissed the appeal, concluding that the doctrine of superseding or intervening cause was particularly appropriate "when the intermediate buyer is a large industrial concern with its own safety programs and method of product distribution and where the manufacturer may have no effective means of communicating its warnings to the ultimate users" Reed v. Pennwalt Corp. (1979

Wash App) 591 P .2d 478, 222 Wash App 718, affirmed and appeal dismissed, 604 P .2d 164, 93 Wash .2d 5. However, when the intermediate customer is not in a better position to pass on the information, giving notice to the seller is not enough. In Shell Oil Company v. Gutierrez, 581 P .2d 271 (Ariz App, 1978), it was determined that Shell had a duty to warn a welder of the danger of explosion from an empty drum of liquid xylene which had been used by an intermediary seller, Christie Oil Company, who repackaged the product in 55 gallon drums and affixed only a flammable liquids symbol on the top of the drum. The court affirmed the jury verdict for the plaintiff:

> ". . . whether a warning beyond the manufacturer's immediate vendee is required in a particular case depends upon various factors. . . . Among them are the likelihood or unlikelihood that harm will occur if the vendee does not pass on the warning to the ultimate user. . . and the ease or burden of the giving of warning by the manufacturer to the ultimate user. . . . Shell failed to adequately warn Christie or Flint of the danger of explosion, the possible precautions, or the type of labeling that would be appropriate."

Professionals, such as physicians who recommend the use of a product, select the product on the basis of superior knowledge, and are responsible for warning clients of product hazards. But if a manufacturer suspects that no professional will intervene who is capable of warning the user, then the manufacturer must supply warning labels and instructions, as in products supplied for large scale injection or immunization programs.

WHO MUST BE WARNED

Certainly, no duty to warn exists where the product is not dangerous or likely to become dangerous in an foreseeable use or circumstance. No duty to warn exists where the danger is obvious. The court dismissed the complaint when Valerie Brown sued Tennessee Donut Corporation after sipping hot coffee from a styrofoam cup and burning her lip and spilling coffee on her leg. The danger that freshly served coffee may be too hot to drink is an obvious danger. Obviousness is usually a matter of the age and experience common to persons similar to the injured person. However, where there is a difference of opinion over the obviousness of the danger, the degree of obviousness presents a question of fact.

One class of users need not be warned, regular users of the product and those whose professional education, training, and experience have given them expert knowledge of the danger. For example, in Hamilton v. Hardy (1976, Colo App) 549 P .2d 1099, 37 Colo App 375, the court said that plaintiff could not complain that he did not receive from the manufacturer and retailer instructions and warning regarding matter which, by reason of his own prior experience, he understood and appreciated. However, manufacturers must estimate carefully the level of knowledge users will have. But in Griggs v. Firestone Tire and Rubber Company 513 F .2d 851 (8th Cir. 1975) a workman who was securing a wheel to a truck suffered permanent injuries when a tire and rim assembly exploded. The defendant argued they "assumed that most people servicing its rims would realize the dangers and possess the requisite aptitude

and experience to assemble the rims safely." In this case, the rim components of the wheel had been mismatched at an earlier time. The need to match parts properly was described in Firestone catalogues, but many local service stations did not have these catalogues. The court disagreed with the company, and recommended that a warning be stamped directly on the product. The expertise of users and the availability of warnings to experienced users should always be considered.

In general, those who must be warned are those who rely on the superior knowledge and advice of the manufacturer or seller and persons who cannot inspect or test the safety of a product (see William Cronen v. J. B. E. Olson Corp. (1972 Cal) 104 Cal Rptr 433 App & E 989). Those in danger, even if a small fraction of the public, must be warned.

One trend that seems to be developing is the substitution of a stricter standard of care in regard to those warned. In Tampa Drug Co. v. Wait (1958 Fla) the court pointed out that "implicit in the duty to warn is the duty to warn with a degree of intensity that would cause a reasonable man to exercise for his own safety the caution commensurate with the potential danger," and added that it is the failure to exercise this degree of caution after proper warning that constitutes contributory negligence, 103 So .2d 603, 75 ALF .2d 765. More recently, the "prudent man" standard has been substituted for the "reasonable man." Prudent persons, being more concerned about making protective judgments, require a more detailed warning and warning about less likely or less severe hazards in order to give themselves greater protection. For example, in Hubbard-Hall Chemical Co. v. Silverman the court ruled that "adequate warning . . . is one calculated to bring home to a reasonably prudent user of a product the nature and extent of the danger involved" 340 F .2d 402 (1st Cir. 1965). In this case the defendant's label, which was approved by the Department of Agriculture, was not satisfactory and the court admonished that "there is no authority that by obtaining governmental approval the defendant had met the possibly higher standard of due care imposed by the common law of torts . . . ." The substitution of the "prudent man test" for the "reasonable man test" has occurred in other areas of professional services, such as accounting, law, and medicine, and appears to be a trend in product liability as well.

Finally, one other trend is changing the population of persons who must be warned. Recent decisions have extended the duty to warn to include illiterate persons, children, and persons who do not speak English. The claim that the user is illiterate is no longer a defense for the adequacy of a warning. In Hubbard-Hall Chemical Company v. Silverman, the court also emphasized that "the defendant should have foreseen that its admittedly dangerous product would have been used by, among others, persons like plaintiff's intestate, who were farm laborers, of limited education and reading ability, and a warning, even if it were in the precise label submitted to the Department of Agriculture would not, because of its lack of a skull and bones or other comparable symbols or heiroglyphics, be adequate instructions or warnings of its [parathion's] dangerous condition." In earlier cases, such as S. C. Johnson & Son, Inc. v. Palmieri (1958, CA Mass) 260 F .2d 88 the courts held that the trier of facts was entitled to assume that the plaintiff could read. Other cases have demonstrated that graphics if not multi-language warnings must be used to convey severe hazards to children, their parents, and persons who do not speak English.

WHAT DANGERS MUST BE EXPLAINED

Three questions are specially important in determining whether a hazard exists about which the supplier must give a warning:

1. How likely is it that an accident will occur when the product is used in more or less the expected manner?

2. How serious an injury is likely to result?

3. How feasible is it to give an effective warning?

The decision to warn involves these questions plus the standard of due care that is applicable in the situation. In general, Kenneth Ross advises companies that suppliers should warn against: "a. An inherent danger in the product which is impossible or difficult to avoid (e.g. drugs); b. A danger that can be avoided if certain precautions are taken before or during use of the product (e.g. poison, flammable material); c. A danger that can be avoided if instructions as to proper methods of use are followed" ("Pre-Accident Prevention of Liability: Manufacturer's Products Liability Prevention Programs," in Prevention and Defense of Manufacturers' Products Liability (1978)). In addition, warnings must also be given when a foreseeable circumstance or unintended use could cause danger.

The extent and severity of the hazard must be explained, so that the user will have adequate notice of the possible consequences of use or even of misuse. The standard has been vividly expressed in Post v. American Cleaning Equipment Corp.: "As an example, it may be doubted that a sign warning, 'Keep Off the Grass,' could be deemed sufficient to apprise a reasonable person that the grass was infested with deadly snakes. In some circumstances a reasonable man might well risk the penalty of not keeping off the grass although he would hardly be so daring if he knew the real consequences of his failing to observe the warning sign. Or, a warning to 'Keep in a Cool Place' might not be sufficient if the result of non-observance was a lethal explosion of the container" (1968, Ky) 437 SW .2d 516. Potentially hazardous deviations from expected use must be declared so that serious consequences may be avoided. Thus, suppliers must now expect to warn against:

a. dangers associated with expected uses of the product, especially all hidden or non-obvious dangers
b. all accidents that might develop through unforeseeable use (because of some property of the product, e.g. flammability)
c. all accidents that might develop through foreseeable misuse (e.g. warning against using lawnmower to trim hedge), and
d. modification or hazards resulting from improper maintenance or repair.

The overall effect of these changes is to require a more thorough and comprehensive effort to warn of all suppliers.

WHAT MAKES A WARNING ADEQUATE

Specifying what makes a warning adequate is more than moderately difficult, because many case decisions affirm that adequacy is a matter for the jury to decide. For example, in Burch v. Amsterdam Corp. (1976 DC App) the appeals court declared that "sufficiency of a particular warning by a manufacturer or seller of a product as to risks involved in the

use of such product is ordinarily a question for the jury" 366 A .2d 1079. Not only is adequacy a matter for the jury to decide, the court need not furnish guidelines to the jury, although some do so: "In strict products liability case, trial court may rule as a matter of law that warnings are inadequate when, and only when, danger is clearly latent and in all other cases, adequacy of both content and prominence of warnings accompanying a product is a question for the jury, and court need not furnish guidelines to aid jury in its determination" Berry v. Coleman Systems Co. 596 P .2d 1365, 23 Wash App 622. The latitude of the jury thus becomes one of the many variables that the technical writer must keep in mind when trying to prepare an adequate warning. What a Virginia jury will consider adequate may not suit the criteria deemed appropriate by an Oregon jury. Thus, no absolute standards can be recommended.

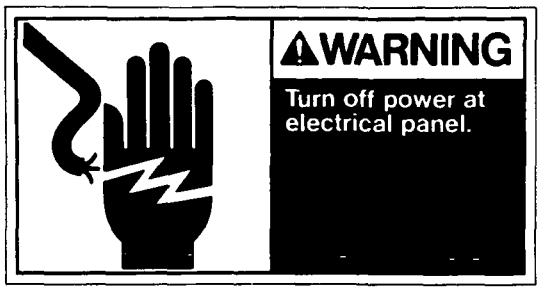
Several federal agencies control the language and format of certain labels, for example: Consumer product Safety Commission, 16 C.F.R. 1500.121 et seq. and 42 Fed. Reg. 23,052 (1977); Environmental Protection Agency, 40 C.F.R. 162.10; Occupational Safety and Health Administration, 29 C.F.R. 1910.145; Nuclear Regulatory Commission, 10 C.F.R. 20.203. The fact that the requirements are established by regulation, however, does not ensure that compliance will be deemed adequate to fulfill the supplier's duty to warn, as was noted earlier in Hubbard-Hall Chemical Company v. Silverman and in Griffin v. Planters Chemical Corp. Because each regulation is limited to a single industry, product, or situation, overlapping standards can cause problems for writers. In general, technical writers should check with the company counsel or with an expert in liability law to determine which regulations are likely to apply to the company's products. After that, the technical writer should apply his own knowledge of liability in devising warnings that meet the most extreme case and the least able user's needs and have the warnings reviewed by the products integrity committee.

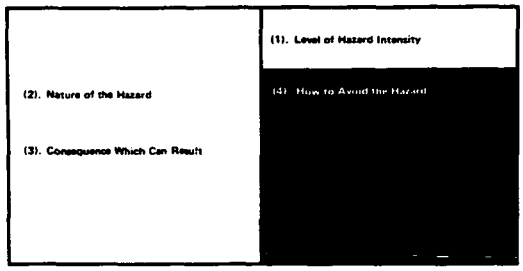
The basic test that a technical writer might apply would demand that a warning tell the seriousness of the risk involved, explain the kind of risk in a way that the reader will understand it, tell how to avoid the risk, and command the attention of the user at the point of use. Other writers have recommended that warnings be accurate, fair, strong and clear, plain, readily noticeable, timely, and actually communicated. Inasmuch as a jury may be able to emphasize or ignore any one of these, this series of standards must only be taken as a tentative guide. The decisions in some cases indicate how such standards may be interpreted.

Sufficient to command the user's attention at the point of action. Recent cases have caused the courts to elaborate on the ability of the warning to make an impression on the mind of the user at the point of action. In Shell Oil Co. v. Gutierrez (1978 Ariz App) the court commented that whether the warning given was adequate "depends on language used and the impression that it is calculated to make upon the mind of the average user of the product" and noted that "adequacy of the warning label on the product is not determined solely by reference to words on the label but also by reference to physical aspects of the warning, such as conspicuousness, prominence and relative size of print; all of such physical aspects must be adequate to alert the reasonably prudent person" 581 P .2d 271. And in Little v. PPG Industries, Inc. (1979 Wash) the finding was that "the applicable question is whether the warning was sufficient to catch the attention of persons who could be expected to use the product and was sufficient to apprise them of its dangers and to advise them of the

measures to take to avoid such dangers" 594 P .2d 911. A concerted effort may be required from writers, designers, graphics specialists, and psychologists trained in human factors engineering in order to determine the proper placement of the warning. Sales representatives and buyers' purchasing agents might also contribute information about the likely use and workplace conditions in which the product might be used.

Appropriate and commensurate to potential danger. Bowen H. Tucker's analysis of product hazard communications provides a useful example of a method for integrating graphic and verbal elements of warnings. He recommends the integration of written communication and pictorial or symbolic representations to alert the broadest range of possible users. His system of presenting warnings calls for showing in the warning (1) the level of hazard intensity, (2) the nature of the hazard, (3) the consequences that can result if the instructions to avoid the hazard are not followed, and (4) instructions on how to avoid the hazard. He advocates a standard system of warnings and representations, something like the international driving symbols, that could be used to warn national and even international purchasers. His system warns of three levels of hazard intensity: danger (immediate hazards which WILL result in severe personal injury or death); warning (hazards or unsafe practices which COULD result in severe personal injury or death; and caution (hazards or unsafe practices which could result in minor personal injury or product or property damage). An example of his formats and warnings follows:





Cooperation with other specialists in the product integrity program team and testing of warnings and manuals before adoption. Making the writing of warnings and other product components part of a systematic effort to ensure product integrity has many advantages for technical writers. Better information about hazards will be available to the writer; better advice about new developments in liability litigation can be obtained from the firm's legal counsel; assistance from the graphics division can improve the ability of warnings to command the attention of users; and more adequate records of the company's efforts to balance the hazards of designs against their merits will be available in the event of liability actions. One further objective can also be accomplished. At present, the adequacy of any warranty, instruction manual, or label can be undermined if the jury decides that the user was lulled into false expectations about the safe use of the product by misleading advertising. For example, if the advertising for a product claims that it is "equipped with fail-safe

brakes" and the brakes subsequently fail, a well-written warranty may be breached and the plaintiff may collect. The unified action of the entire group of persons involved with product integrity can lead to the elimination of inconsistencies in product literature as well as to the prevention of accidents.

FUTURE RESPONSIBILITIES

Technical writers, as the group of persons who "choose the words," should expect to lead efforts to improve the quality of the many product components that are delivered to the consumer in written form. To provide this leadership they must become familiar with the pertinent regulations, with the standards of voluntary associations, and with trends in liability litigation. New laws, patterned after models such as those created by the American Law Institute or the federal uniform product liability law announced by the Department of Commerce and introduced by Representative Preyer of North Carolina as H.R. 7921 but not passed during the last session of Congress, may affect the criteria that warnings and other written product components must meet. No single source or magic touchstone is known. Technical writers will have to face a responsibility similar to that confronting every jury determining what language and notice will be sufficient to command the attention of the actual users of a product under the full range of possible circumstances in which the product may be used and to give them clear notice of the necessary action to keep themselves safe from harm.

SELECTED BIBLIOGRAPHY

Dillard and Hecht, Product Liability: Direction for Use and the Duty to Warn, 41 Va. L. Rev. 145 (1955).

Restatement of the Law, Second Torts .2d, The American Law Institute, 1976.

Hursh and Bailey, American Law of Products Liability .2d, New York, 1974.

Noel, Products Defective Because of Inadequate Directions or Warnings, 23 SW L. J. 256

Prevention and Defense of Manufacturers' Products Liability, Kenneth Ross, Chairman, Practising Law Institute, New York, 1978.

Product Liability of Manufacturers: Prevention and Defense, Kenneth Ross and Martin J. Foley, Cochairmen, Practising Law Institute, New York, 1979.

Articles on Liability Prevention: W. Jacobs, "Impact of Products Liability Verdicts on Engineering Management Procedures," Tr Law Guide 19:1-24 (1975); Peter N. Sheridan, "Pre-Accident Prevention of Liability: Manufacturers' Products Liability Prevention Programs," in Prevention and Defense . . . listed above, pp. 49-120; also Bowen H. Tucker, "Product Hazard Communication," in the same volume, pp. 121-228.